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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,925	06/02/2000	LIONEL JEAN	GEM-400	5660

21839 7590 01/06/2005

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EXAMINER

ZIA, SYED

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/462,925

Applicant(s)

JEAN ET AL.

Examiner

Syed Zia

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 24, 2004 has been entered.

Response to Amendment

2. This office action is in response to amendment filed on August 24, 2004. Original application contained Claims 1-24. Applicant amended Claims 1, 2, 7, 10-12, 21-22, and 24. The amendment filed have been entered and made of record. Presently pending claims are 1-24.

Response to Arguments

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

Examiner acknowledges corrected drawings submitted on March 10, 2004. The submitted drawings have been entered and made of record.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant claimed subject matter *externally* of the smart card, which does not provide necessary description what does externally constitute? Whether counting, is done on a separately mounted device connected by a wire (or wirelessly i.e. remotely) to the terminal or counting is done on a removable device connected by a wire (or wirelessly i.e. remotely)

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1, 10, 12, and 22 recites the limitation "the counted number" in line number 9, line number 1, line number 4, and line number 6 respectively.

Claim 7 recites the limitation "the step of re-initializing" in line number 2.

There is insufficient antecedent basis for these limitations in the claims.

Claim Objections

The claims 5 and 15 are objected to because they include reference characters which are enclosed within parentheses but not spelled out or described.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-5, 7-15, and 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamada et al. U.S. Patent No. 4,879,645 ("Tamada" hereinafter) and further in view of Branham (WO 93/25024) ("Branham" hereinafter).

2. Regarding claim 1, Tamada disclose a method of managing a secure terminal used for transactions with smart cards (see abstract; Fig. 1), comprising:

detecting placement of a smart card in contact with the terminal (see Fig. 1; col. 2, lines 20-23, and 48-50);

executing a program by the terminal, said program including sensitive operations related to making the transactions secure (see col. 2, lines 32-40);

counting, externally of the smart card, the number of times a request is made to the terminal to execute sensitive operations (see col. 1, lines 36-43; col. 2, lines 54-62);

restricting the action of said terminal when the counted number reaches a predetermined value (see col. 1, lines 36-43; col. 4, lines 3-9).

Although the system disclosed by Tamada show all the features of the claimed limitation, but it does not specifically disclose the a removable security circuit device *external to the smart card and terminal* when terminal operates to restrict the operation when certain conditions are present.

In an analogous art, Branham, on the other hand, discloses computing security environment for monitoring with an external security device (Fig.1 Item 15). This monitoring external security device has an interface to write to host system (i.e. terminal) (Fig.1, Item 12). The communications between host system (i.e. terminal) and this external security device (i.e. external to smart card and terminal) are protected by requiring device-specific information to initiate the communication (Fig.1, Page 3 line 16 to line 33, and Page 4 line 17 to line 30).

It would have been obvious to one skilled in the art at the time of invention was made to combine the teachings of Tamada and Branham, because Branham's *external and removable* security device will make the system of Tamada further secure for counting management program operation, and to ensure that smart-card reading terminals are not employed for uses outside of the application to which they are dedicated by restricting the operation of the terminal when certain required conditions, such as security concerns, are present. Thus, this intelligent

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external and removable characteristic of Branham security device (i.e. circuit) will also let the terminal to perform non-sensitive operation when the counted number of sensitive operations requested of the terminal reaches a maximum value.

3. Claims 2-5, 7, and 10-12 are rejected applied as above rejecting Claim 1. Furthermore, the system of Tamada and Branham teaches and describe a method of managing a secure.

As per Claim 2, further comprising: providing the terminal with a removable electronic security circuit (see Branham: Fig.1 Item 15, and Tamada: Fig. 1; col. 2, lines 13-20), and

wherein said counting step comprises counting in said security circuit (Branham: Fig.1 Item 15), the number of requests for sensitive operations which are made to said security circuit or sensitive operations executed by said security circuit (see Tamada: col. 2, lines 54-62).

As per claim 3, further comprising: dividing the sensitive operations into a number of classes (see Tamada: col. 3, lines 4-22) and; establishing a count for each class (see Tamada: col. 3, lines 23-37).

As per claim 4, further comprising: as sensitive operation, performing a mutual identification procedure between the terminal and the card (see Tamada: col. 2, lines 13-31).

As per claim 5, further comprising: as a sensitive operation, performing an authentication (PIN) of a carrier of the smart card (see Tamada: col. 2, lines 14-31).

As per claim 7, further including the step of re-initializing the counted number by a secure procedure including a verification of a secret code by the terminal or a security circuit (see Tamada: col. 2, lines 32-44, and col. 3, lines 29-37).

As per claim 10, wherein the counter is incremented after a successful sensitive operation (see Tamada: Fig. 4; col. 2, lines 54-62).

As per claim 11, wherein for restricting, only secure operations of the executing program are prevented (see Tamada: col. 2, lines 54-62; col. 4, lines 10-25).

As per claim 12, comprising the management means that is capable of identifying and counting requests coming from outside the security circuit and restricting functions of said security circuit as soon as the counted number reaches a predetermined number (see Tamada: col. 2, lines 54-62).

4. Claims 8-9, and 13 are rejected applied as above rejecting Claim 2, and 7. Furthermore, the system of Tamada and Branham teaches and describe a method of managing a secure.

As per claim 8, wherein the secure procedure includes a verification of a secret code by the terminal (see Tamada: col. 2, lines 32-44) or the security circuit (Branham: Fig.1 Item 15, and Tamada: col. 2, lines 32-44)

As per claim 9, wherein the re-initialization is performed remotely by a master system (see Tamada: col. 2, lines 45-53; col. 3, lines 29-37).

As per claim 13, further comprising: dividing the sensitive operations into a number of classes (see Tamada: col. 3, lines 4-22) and; establishing a cont for each class (see col. 3, lines 23-37).

5. Claims 14, 17, and 20-22 are rejected applied as above rejecting Claim 13. Furthermore, the system of Tamada and Branham teaches and describe a method of managing a secure.

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As per claim 14, further comprising: as sensitive operation, performing a mutual identification procedure between the terminal and the card (see Tamada: Fig. 1; col. 1, lines 46-49; col. 2, lines 13-22).

As per claim 17, wherein a counter is re-initialized by a secure procedure including a verification of a secret code by the terminal or the security circuit (see Tamada: col. 2, lines 27-44; col. 3, lines 29-37).

As per claim 20, wherein a counter is incremented after a successful sensitive operation (see Tamada: col. 4, lines 19-25).

As per claim 21, wherein for restricting, only secure operations of the executing program are prevented (see Tamada: col. 2, lines 54-62; col. 4, lines 10-25).

As per claim 22, comprising the management means that is capable of: identifying and counting requests coming from outside the security circuit and restricting functions of the security circuit as soon as the counted number reaches a predetermined number (see Tamada: col. 4, lines 10-25).

6. Claims 15, and 18-19 are rejected applied as above rejecting Claim 14, and 17.

Furthermore, the system of Tamada and Branham teaches and describe a method of managing a secure.

As per claim 15, further comprising: as a sensitive operation, performing an authentication (PIN) of a carrier of the smart card (see Tamada: col. 2, lines 14-31).

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As per claim 18, wherein the secure procedure includes a verification of a secret code by the terminal or the security circuit (see Tamada: Fig. 3; col. 2, lines 32-44).

As per claim 19, wherein the re-initialization is performed remotely by a master system (see Tamada: col. 2, lines 45-53, and col. 3, lines 29-37).

7. Claims 23, and 24 are rejected applied as above rejecting Claim 19. Furthermore, the system of Tamada and Branham teaches and describe a method of managing a secure.

As per claim 23, wherein a counter is incremented after a successful sensitive operation (see Tamada: Fig. 4; col. 2, lines 54-62).

As per claim 24, wherein for restricting, only secure operations of the executing program are prevented (see Tamada: col. 2, lines 54-62, and col. 4, lines 10-25).

8. Claims 6, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamada et al. U.S. Patent No. 4,879,645, in view of Branham (WO 93/25024) and further in view of Asad et al. U.S. Patent No. 6,539,093 ('Asad' hereinafter).

Claims 6, and 16 are rejected applied as above rejecting claim 1, and 13. Furthermore, the system Tamada and Branham teaches all the limitations as above as indicated in claim 1, and 13.

Tamada does not disclose a sensitive operation, performing a verification of a certificate coming from a smart card.

However, Asad discloses a sensitive operation, performing a verification of a certificate coming from a smart card (see col. 3, lines 43-50).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Asad within the system of Tamada and Branham to arrive at the invention as claimed because both references are directed to placing a smart card in contact with a terminal, and because the implementation of performing a verification of a certificate of Asad in Tamada and Branham would further certify that the information coming from the smart card is authentic and that the card is authorized to access the terminal, further increasing the level of security and extending the capabilities of the combined system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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December 14, 2004